



TransCanada Pipelines selects HTVS for monitoring aeroderivatives

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TransCanada Pipelines (TCPL) and Bently Nevada have tested the new High Temperature Velomitor System. TCPL owns and operates 152 gas turbine-driven compression units across Canada. The testing was conducted over a period of four months. The unit chosen was located at TCPL's station 17 near Regina, Saskatchewan, Canada. The test was arranged and site coordination provided by Robert Betts and Fred Anronuik of TCPL. Installation services were provided by Bently Nevada personnel from Edmonton, Alberta, Canada; Denver, Colorado; and Houston, Texas.



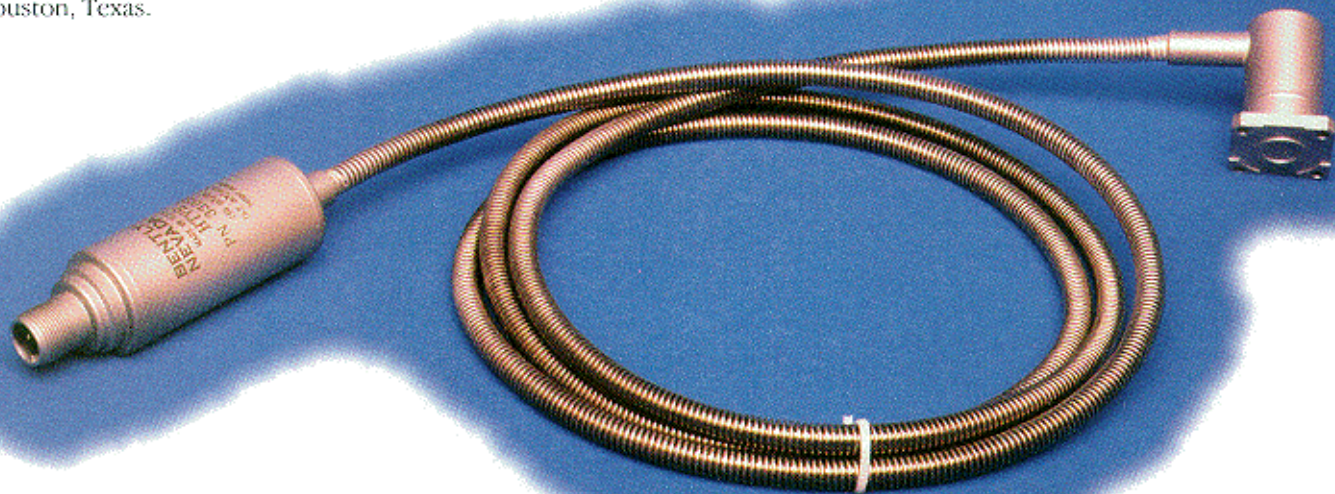
TransCanada Pipeline Station 17,
near Regina, Saskatchewan, Canada

TCPL has approved the HTVS for use as a machinery protection transducer system. To date, a total of 48 HTVS transducers have been purchased for this year's retrofit program at TCPL. These transducers will be used by TCPL on the retrofit of Rolls Royce Avon, Westinghouse W62 and W92 gas turbines.

This test provided TCPL with an alternative transducer to monitor some of their gas turbine applications, at a significant cost savings. TCPL has used the HTVS extensively for their 1995 retrofit program.

Turbine tests

Each gas turbine has its own unique casing vibration environments. Therefore, the HTVS will be tested on each type of gas turbine before it is offered for general sale on that turbine. ■



Bently Nevada's High Temperature Velomitor® System (HTVS) has a high temperature, 260°C (500°F), piezoelectric sensing element. The piezoelectric sensing element and the electronics are in two separate cases, permanently connected by a sealed flexible tube. The whole assembly is hermetically-sealed. This allows the electronics to be located in an area where the tem-

perature is much lower than it is on the casing of the gas turbine, without having connectors between the sensing unit and the electronics. Connectors between the piezoelectric sensing unit and the electronics have been a major source of nuisance alarms and shutdowns on gas turbines fitted with piezoelectric, accelerometer-based, seismic vibration monitoring systems.